



# PBDE Advisory Committee

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Meeting No. 3

November 16, 2005

Landmark Convention Center, Tacoma WA



## Interim CAP:

### Source Control Recommendation for Deca

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- Ecology and Health, in consultation with stakeholders, should develop a proposal for a ban on appropriate products containing Deca-BDE, by December 2005.
  - Maximize benefits of a ban while minimizing impacts on manufacturers, retailers and consumers and ensuring adequate fire protection.



# Interim CAP: Elements of Deca Source Control Efforts

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- Determine types of products covered by ban
- Evaluate human health, environmental and economic impacts
- Investigate alternative materials, product design changes and chemicals that meet fire safety standards
- Investigate impacts on fire safety
- Investigate impacts on retailers and consumers
- Examine exemption processes
- Continue to monitor emerging information



# Process to Develop Deca-BDE Source Control Recommendations

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- Reconvened the stakeholders in July, 2005.
- Health conducted the Alternatives Assessment.
- Ecology conducted the Cost Benefit Analysis of a deca-BDE ban.
- Both agencies tracked emerging science.



# Conclusions: Alternatives Assessment

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- Alternatives to Deca-BDE are available and feasible for use in HIPS and HIPS/PPO.
- Several alternatives look promising, but a clearly safer alternative has not yet been identified.
- Toxicity, persistence and bioaccumulation data is lacking
- Alternatives Assessment work is ongoing



# Conclusions: Cost Benefit Analysis

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- Data difficult to collect- no incentive to share data, confidentiality is still an issue
- Conclusions regarding costs and benefits are difficult to draw due to data gaps
  - Conservative assumptions indicate net benefits from a Deca-BDE ban if a benign alternative is available
- Utility of the Cost Benefit Analysis limited in this context



## Conclusions: Deca-BDE

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- Continued or expanded use of Deca-BDE is likely to lead to increasing exposure to people and build up in the environment.
- Deca-BDE does breakdown via UV radiation and biological activity and will continue to be a source of lower congeners for some time



## Conclusions: Deca-BDE

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- Prudent public health policy dictates that Ecology and Health continue to pursue a ban of Deca-BDE
- A ban should allow manufacturers time to identify or develop safer alternatives or design changes that preclude the need for Deca-BDE





# Our Recommendations

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- The legislature should ban deca-BDE in electronic enclosures provided that safer alternatives are found or with additional evidence of deca-BDE harm.
- Ecology and Health should evaluate a ban on deca-BDE in other products such as textiles and mattresses.
- The legislature should provide necessary funding for Ecology and Health.
  - Continuing evaluation of emerging data
  - Independent modeling of toxicity of alternatives
  - Environmental/biomonitoring efforts



# Final PBDE Chemical Action Plan Recommendations

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# Source Control

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## Penta-BDE and Octa-BDE

- The Washington State legislature should ban the manufacture, distribution (but not transshipment) or sale of new products containing penta-BDE and Octa-BDE in Washington.



# Source Control

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## Deca-BDE

- The Washington State legislature should ban deca in electronic enclosures providing safer alternatives are identified or with additional evidence of deca-BDE harm.
- Ecology and Health should evaluate a ban on deca-BDE in other products such as textiles and mattresses.



# End-of-Life

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- Ecology should establish a process to evaluate and determine appropriate disposal and recycling practices for products containing PBDEs, including potential financing options.
- Ecology should involve appropriate stakeholders in this process.
- ❖ This work has begun.



# U.S. Chemical Policy

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Ecology and Health should actively seek opportunities to work with other states and interested parties to contribute to the national dialogue regarding needed improvements to U.S. chemical policy, with a goal of developing and advocating practical solutions.



# Minimizing Human Exposure

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## **State Purchasing**

The state's purchase of PBDE-containing products should be restricted in appropriate contracts, consistent with Executive Order 04-01.

# Minimizing Human Exposure

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## **General Public**

- Health should develop methods and materials for educating the public on how to minimize exposure to PBDEs.
  - *“Toxics in the Home” brochure*
  - *PBDE brochure*
  - *PBDE websites – Ecology and Health*
- ❖ This work is completed.





# Minimizing Human Exposure

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## **Occupational Exposure**

- The state department of Labor and Industries (L&I) should develop and communicate ways for employers and employees to minimize exposure to PBDE- containing dust using standard industrial hygiene controls [Completed]
- Health and L&I should continue to investigate the feasibility of implementing a workplace exposure study in collaboration with CDC. [work underway]
  - Difficulty in getting participation



# Monitoring and Research

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## **Human Health Monitoring**

- Health should explore biomonitoring for PBDEs and alternatives.
- Health and L&I should coordinate with CDC on existing national biomonitoring of PBDEs.



# Monitoring and Research

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## **Environmental Monitoring**

Ecology should develop a monitoring program for PBDEs in the environment.

❖ Work has begun.



# Monitoring and Research

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## **Research**

- Ecology and Health should track and encourage other government agencies and research institutions to conduct research on:
  - Deca-BDE debromination
  - Fate of PBDEs in landfills
  - Establish baseline for non-brominated alternatives to PBDEs to assist future studies
  - Product redesign
  - PBDE exposure pathways



# Incentives

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If safer alternatives are not identified, Ecology and Health should explore incentives to encourage manufacturers to develop safer alternatives and product design changes that eliminate the need for PBDEs.



# NEXT STEPS

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- Complete the PBDE CAP by December, 2005
  - 30 day public comment period begins November 23, 2005.
- Develop end-of-life recommendations, using a newly established Advisory Committee
- Implement PBDE CAP recommendations as funding allows